AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims

Claim 1 (Currently amended): An electromechanical signal selection device comprising:

a micro-vibrator which can be excited by an input signal; and

a post for retaining the micro-vibrator,

wherein the physical property of the micro-vibrator changes in accordance with a crystal structural change of the micro-vibrator when excited so as to select a signal.

Claim 2 (Cancelled):

Claim 3 (Previously presented): The electromechanical signal selection device according to claim 1, wherein the physical property is an electric conduction characteristic.

Claim 4 (Currently amended): ~~The electromechanical signal selection device according to claim 1,~~ An electromechanical signal selection device comprising:

a micro-vibrator which can be excited by an input signal; and

a post for retaining the micro-vibrator,

wherein the physical property of the micro-vibrator changes when excited so as to select a signal, and

wherein the micro-vibrator is retained by an electrode placed on the post.

Claim 5 (Original): The electromechanical signal selection device according to claim 4, wherein a bonded surface between the electrode and the micro-vibrator is located at a distance from the post.

Claim 6 (Original): The electromechanical signal selection device according to claim 1, wherein the post comprises a structure having lower rigidity than that of the micro-vibrator.

Claim 7 (Original): The electromechanical signal selection device according to claim 1, wherein the micro-vibrator comprises a multilayer structure of at least two layers including a material layer generating the change in physical property and a conductor layer.

Claim 8 (Currently amended): ~~The electromechanical signal selection device according to claim 7,~~ An electromechanical signal selection device comprising:

a micro-vibrator which can be excited by an input signal; and

a post for retaining the micro-vibrator,

wherein the physical property of the micro-vibrator changes when excited so as to select a signal,

wherein the micro-vibrator comprises a multilayer structure of at least two layers including a material layer generating the change in physical property and a conductor layer,

wherein the conductor is formed to be linear, and

wherein the material layer generating the change in physical property is formed around the linear conductor layer.

Claim 9 (Original): The electromechanical signal selection device according to claim 7, wherein the material layer generating the change in physical property is formed on the side where an electric field of a signal is concentrated.

Claim 10 (Currently amended): ~~The electromechanical signal selection device according to claim 9,~~ An electromechanical signal selection device comprising:

a micro-vibrator which can be excited by an input signal; and

a post for retaining the micro-vibrator,

wherein the physical property of the micro-vibrator changes when excited so as to select a signal,

wherein the micro-vibrator comprises a multilayer structure of at least two layers including a material layer generating the change in physical property and a conductor layer,

wherein the material layer generating the change in physical property is formed on the side where an electric field of a signal is concentrated, and

wherein the material layer generating the change in physical property is formed under the substrate side of the conductor layer.

Claim 11 (Currently amended): ~~The electromechanical signal selection device according to claim 7,~~ An electromechanical signal selection device comprising:

a micro-vibrator which can be excited by an input signal; and

a post for retaining the micro-vibrator,

wherein the physical property of the micro-vibrator changes when excited so as to select a signal,

wherein the micro-vibrator comprises a multilayer structure of at least two layers including a material layer generating the change in physical property and a conductor layer, and

wherein half the radius of the conductor is not larger than skin depth of a high frequency signal.

Claim 12 (Original): The electromechanical signal selection device according to claim 1, wherein the micro-vibrator comprises perovskite type transition metal oxide.

Claim 13 (Original): The electromechanical signal selection device according to claim 12, wherein the perovskite type transition metal oxide is $PrNiO_3$ showing metal-insulator transition.

Claim 14 (Original): The electromechanical signal selection device according to claim 1, wherein the micro-vibrator comprises a piezoresistive effect material.

Claim 15 (Original): The electromechanical signal selection device according to claim 14, wherein the micro-vibrator comprises at least one of Si, $La_{1-x}Sr_xMnO_3$ and $BaTiO_3$.

Claim 16 (Original): The electromechanical signal selection device according to claim 1, wherein the micro-vibrator comprises a superconductor.

Claim 17 (Original): The electromechanical signal selection device according to claim 16, wherein the superconductor is one of Al, Pb, $La_{2-x}Sr_xCuO_4$ and $(BEDTTTF)_2I_3$.

Claim 18 (Original): The electromechanical signal selection device according to claim 1, wherein the micro-vibrator comprises a carbon-based material.

Claim 19 (Original): The electromechanical signal selection device according to claim 1, wherein the input signal is supplied through an electrode provided in the micro-vibrator.

Claim 20 (Currently amended): ~~The electromechanical signal selection device according to claim 1,~~ An electromechanical signal selection device comprising:

a micro-vibrator which can be excited by an input signal; and

a post for retaining the micro-vibrator,

wherein the physical property of the micro-vibrator changes when excited so as to select a signal, and

wherein the input signal is supplied through a driving electrode disposed adjacently to the micro-vibrator.

Claim 21 (Previously presented): The electromechanical signal selection device according to claim 20, wherein an external force to be applied to the driving electrode is an electrostatic force.

Claim 22 (Currently amended): ~~The electromechanical signal selection device according to claim 1,~~ An electromechanical signal selection device comprising:

a micro-vibrator which can be excited by an input signal; and

a post for retaining the micro-vibrator,

wherein the physical property of the micro-vibrator changes when excited so as to select a signal, and

wherein a mechanism for applying an external magnetic field to the micro-vibrator is provided to excite the micro-vibrator due to a Lorentz force.

Claim 23 (Currently amended): ~~The electromechanical signal selection device according to claim 1,~~ An electromechanical signal selection device comprising:

a micro-vibrator which can be excited by an input signal; and

a post for retaining the micro-vibrator,

wherein the physical property of the micro-vibrator changes when excited so as to select a signal, and

wherein a mechanism for applying an external magnetic field is provided in a driving electrode or a signal input electrode

disposed adjacently to the micro-vibrator so as to excite vibration of the micro-vibrator in a desired direction.

Claim 24 (Original): The electromechanical signal selection device according to claim 1, wherein the change in physical property is caused by piezoelectric effect.

Claim 25 (Original): The electromechanical signal selection device according to claim 24, wherein the micro-vibrator is designed to generate a signal by virtue of the piezoelectric effect when the micro-vibrator is excited to produce a structural change.

Claim 26 (Original): The electromechanical signal selection device according to claim 1, wherein the micro-vibrator comprises ceramics.

Claim 27 (Original): The electromechanical signal selection device according to claim 26, wherein the micro-vibrator comprises PZT.